

Chapter Four

Providing A Safe and Nurturing Environment



A well-designed environment must be safe for infants and toddlers without compromising opportunities to challenge their motor skills, stimulate their senses, and support their emotional well-being. Injury is the leading cause of childhood death and disability and results from an unsafe encounter between a child, the cause of the injury, and the environment. The child care health consultant can play an important role in assuring that surroundings are safe for infants and toddlers to explore freely. Develop a check list of health and safety items, including items that might be checked by other regulators, such as fire exits, smoke or carbon monoxide detectors, and refrigerator thermometers (see Safety Checklist in Appendix I). This chapter addresses ways to promote a nurturing environment and decrease the risks for infants in group care settings.

Nurturing environments for infants are purposeful, engaging, warm, inviting, interesting, functional, and beautiful places where children and staff can thrive. They provide endless opportunities for inventing and creating as well as supporting development. At the same time, every physical space has its unique challenges and qualities - no one set of guidelines or standard room design works for everyone, every program, or every space. Understanding the way infants function and how they learn is critical to providing nurturing environments indoors and out. Infants experience a very different world than adults do, one dominated by senses and bounded by the here and now. The scale of settings they find themselves in is rarely accommodating to their size and needs; a quality child care environment, though, takes into account the unique aspects of young children. It is important that, to the extent possible, the environment reflects and not conflicts with the child's culture. As the health consultant, you may have the opportunity to work with providers to design and/or modify infant environments that are safe as well as nurturing.

If infants or toddlers could choose their own setting, they might ask some different questions than their adult caregivers. The "Quick Evaluation of an Infant or Toddler Learning/Caring Environment" (Appendix A) contains an environmental evaluation check list which is one way to consider what is needed in young children's indoor and outdoor environments. The following sections discuss other ways to ensure that those environments also are safe.

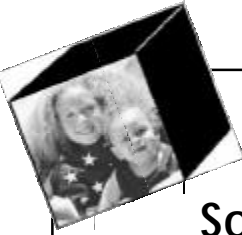
Nurturing Environments

One important thing to do to improve an indoor environment for children is to remove tobacco smoke. Encourage providers to have a non-smoking indoor environment. Even better, discourage smoking outside the child care facility. Children should not have to walk or be carried through second-hand smoke. Toddlers will often pick up cigarette waste products, butts, and ashes and put them in their mouth.

Indoor Environments

Indoor Environments

continued



Health Consultant Tip

Some Essentials in the Infant Environment

Encourage providers to include these essentials in their facility. Look for them when doing site evaluations.

- Diapering area
- Feeding area(s)
- Sleeping area/arrangements
- Play areas
- Display and storage for toys
- Access to kitchen/food preparation area
- Access to outside
- Windows
- Flexible lighting
- Storage for infant belongings (i.e. diaper bags, extra clothing, pacifiers)
- Toy washing area
- Information bulletin boards (for families and staff)
- Washer/dryer/linen area

When looking at an indoor environment, ask yourself the following questions when evaluating an infant room.

1. Is the current space working well? What elements do you find appealing and why? What elements are not working and why?
2. How does the space design promote or hinder development?
3. What elements in the environment awaken the senses (i.e., pleasant smells, variety of different textures to touch and hold, variety of different sounds to hear and make)?
4. Are the infants offered a variety of safe experiences?
5. Are different learning areas provided (i.e., level changes, furniture at different angles)?

Appendix F contains a provider education document with references for providers who want to learn more about nurturing environments or want to design an infant room.

Outdoor Environments

Benefits of Outdoor Play for Infants

Outdoor play spaces are an important aspect of environments for infants in child care settings. The outdoors offers some things the indoor setting cannot, such as: climate—wind, sun, rain, fog, clouds, snow, warmth, and cold; landscape—hills and knolls, hedges, ruts, holes, surfaces of all sorts of textures and levels, and vegetation with varying colors and smells; openness; messiness; wildlife—bugs, worms, and other life forms; people.

Jim Greenman is a child care consultant who has written knowledgeably and delightfully about outdoor settings for infants. He describes the ideal outdoor space for infants as needing “to be safe to eat” and including a variety of:

1. **Surfaces:** Grass, sand, wood as well as gentle inclines to roll down and toddle up, grassy knolls to feel secluded in, and flat surfaces to wobble upon;

Outdoor Environments

continued

2. **Textures:** Smooth round boulders, coarse bark and smooth wood, pine needles, and other vegetation (check with Poison Control about what is toxic);
3. **Color and scent as seasons change;**
4. **Places to be:** Shady spots and sunny spots, open areas and safe hideaways;
5. **Pathways:** Changing surfaces such as dirt, half logs, wood rounds, patterned rocks, etc., to provide motor challenges and sensory exploration for infants as they crawl, toddle, push, or haul;
6. **Barriers:** Tunnels, slatted wooden surfaces, shrubs, tiny retaining walls of rock or wood, and gates that open and close combine learning and crowd control;
7. **Structures:** Canopies, swings, skeletal structures, fabric and flapping things, platforms, slides, sound structures, wobbly structures, benches (for adults to sit on or lean against).

Evaluating the Outdoor Environment

The health consultant could be asked to review the safety of the outdoor environment for infants. Overall safety should be the first concern. The area should be free of sharp edges, protrusions (especially those at a child's eye level), and broken equipment. Playground equipment should not be able to pinch or crush a child's fingers. Footings securing equipment to the ground should not be exposed. There should be no poisonous plants or toxic substances in the dirt. Shade should be provided to protect infant skin. Surfaces should be well maintained particularly under gross motor climbing equipment, swings, slides, etc. The equipment should be developmentally appropriate with areas for infant sensory exploration that can be maintained for safety and cleanliness. Buckets and swings should be enclosed and have back support. Stationary equipment is best for infants and early toddlers. Finally, always observe equipment for entrapment and/or entanglement hazard. Openings more than 3.5 inches and less than 9 inches that an infant or toddler could get their body through, but not their head, are a danger. Look for protruding bolts, gaps in the equipment or hooks that might catch on clothing and strangle a child.

Appendix F includes a handout describing how to create a safe outdoor environment. Health consultants who are asked to review an outdoor environment should be familiar with these guidelines. It is also important that any recommendation for change be coordinated with the health surveyor and licensor.

In the past, the term "accident" was used to describe incidents that caused physical harm. The word has come to mean an unpredictable event, bad luck, or careless behavior that results in unintended harm. Today, health experts believe that "injury" is a more appropriate term. Studies show that many factors cause harmful incidents to happen, and many measures can be taken to prevent them.

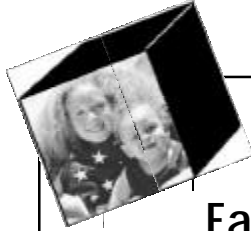
Although it is unrealistic to expect to prevent any injuries from happening in childhood, infant programs can do many things to significantly decrease the chance that children in their care will be seriously injured.

Injury Risks

Injury Risks

continued

Children's risks for injury and the safety measures needed differ according to age and development. Numerous tools exist to assess the infant environment for safety hazards. These guides can help you as you work with caregivers to provide safe and nurturing environments for infants. The remainder of this chapter summarizes some of the particular safety issues specific to infants. Appendix I has infant and toddler risk injury information.



Health Consultant Tip

Factors Increasing Childhood Injury Risk

1. Atypical developmental or physical abilities for the child's age (whether delays, sensory deficits, or advanced abilities).
2. Temperamental characteristics such as curiosity, risk-taking, high physical activity level, impulsivity, and distractibility.
3. Developmentally inappropriate equipment accessible to children .
4. Certain activities and times of the day: late morning and late afternoon and evening when children are tired and hungry, during transitions between activities, when the routine is disrupted, and while adults are busy doing other things.
5. Toy chests without air holes and without a lid support. A lid that slams shut can cause head injuries or suffocation.
6. Certain places and facilities pose greater risks including bodies of water, swimming pools, bathrooms, and kitchens.

Toy Safety for Different Ages

Understanding typical developmental characteristics for the ages of children in care will help you guide caregivers in choosing safe toys. Appendix D has a toy safety guide. Another valuable resource for selecting safe toys is the booklet prepared by the U.S. Consumer Product Safety Commission, *The Safe Nursery. Suitable Toys*, a pamphlet from Children's Regional Hospital and Medical Center in Seattle, is also an excellent resource.

Key principles the CCHC should consider when observing toys in infant settings:

1. Toys should have no sharp edges or points, small parts, pinch points, chipped paint, splinters, or loose nuts or bolts.
2. Painted toys should be painted with lead-free paint. If a toy is painted, ask about the paint.
3. Plastic bags or balloons should not be accessible to children.
4. Toys should not fit completely into a child's mouth and should have no small, detachable parts to cause choking. Coins, safety pins, or marbles can lead to choking in children under four years of age. Use of a "choke tube" to check the size of toys is recommended.
5. Toy chests should have air holes and a lid support or have no lid. A lid that slams shut can cause head injuries or suffocation.
6. Shooting or projectile toys should not be allowed.

7. Commercial art materials should be stored in their original containers out of children's reach. The word "non-toxic" must appear on the manufacturer's label. See Appendix I for alternatives to toxic materials.
8. Toys should not be hung across the cribs of infants who can sit up. Rattles, pacifiers, or other objects should never be hung around an infant's neck.
9. Infant walkers should not be allowed.

Toy Safety for Different Ages

continued

Child care providers are in an excellent position to encourage parents to think about the use of car seats to keep their infants safe. By setting good examples and having community resources available, they can have a direct impact on the safety of the children in their care. In addition, the health consultant can assist the provider with a transportation policy for the program. A sample transportation policy can be found in Appendix E.

Car Seats

Proper use of car seats can be a frustrating and a sensitive topic for parents. The following suggestions can help child care providers handle this important issue:

1. Before providers discuss car seat issues with parents, they should have a list of community programs that have low cost car seats or free loaner seats available.
2. Providers need to keep their opinions in check when talking with families. For example, a dirty car seat is not an indicator of the quality of the seat. It usually means that the seat is in use—a lot. If the seat is left at the center frequently, the provider can offer to wash the seat cover and generally clean it up. The provider can involve the kids as "car seat washers," and the provider can have an opportunity to look the seat over and assess its safety.
3. Providers can make Child Passenger Safety information available to families in the form of flyers, newsletters, or parent meetings with speakers from the community to talk about car seat safety.
4. Providers need to be good examples for families. When they use a car seat brought by a family, they need to examine the seat for cracks and tears in the belts and to see how it fits in their car. If providers have their own car seats for transportation, they need to maintain them in good repair and install and use them properly.
5. Providers should encourage children to be "Buckle Up Buddies." "Buckle Up Buddies" make sure that everyone is buckled up before the car starts and that everyone stays buckled up. This is a great game for children and helps get the message to parents too.
6. Providers can post the car seat law in their center. This lets families know they're concerned about the safety of their children while in the car.
7. Providers can consult with a certified child passenger safety technician about proper use of child safety seats. In Washington, call the Safety Restraint Coalition (see Resources and References).

Types of Child Safety Seats

One of the activities of a CCHC may be to review vehicle safety equipment or work with a child care program to develop a child safety seat policy. There are four basic types of child safety seats in existence for use by infants.

Car Seats continued

1. **Rear-facing Safety Seat:** Designed for children up to 20–22 lbs. and 26 inches. These seats are to be used in the rear-facing position only, ideally in the back seat. A rear-facing seat must NEVER be placed in the front passenger seat of any vehicle equipped with an air bag (assume that all vehicles have air bags).
2. **Rear-facing/Forward-facing Convertible Safety Seat:** These seats will grow with the child and can be safely used from birth to 40 lbs. Convertible seats must be used rear-facing until the child is one year of age and weighs at least 20 lbs. The seat is used forward-facing up to 40 lbs. Seats with a 5-point harness system are ideal.



Caregiver Tip

Songs to Encourage Child Passenger Safety and Safety Seat Use

Children need transportation safety information, too. The songs below are one way to begin this education with very young children.

THE WHEELS OF THE CAR

(Adapted from materials from the Michigan Office of Highway Safety Planning to the tune of "The Wheels on the Bus")

The wheels of the car go 'round and 'round
Round and 'round, 'round and 'round.
The wheels of the car go 'round and 'round
All through the town.

We're all snug in our safety seats
Safety seats, safety seats.
We're all snug in our safety seats
All through the town.

We always sit in the back seat
back seat, back seat
We always sit in the back seat
All through the town.

THIS IS THE WAY WE RIDE

(Adapted from Transportation Center, University of Tennessee)

This is the way we ride to school, ride to school
ride to school
This is the way we ride to school
In our safety seats.

This is the way we buckle our belts
Buckle our belts, buckle our belts
This is the way we buckle our belts
Every time we ride.

3. **Safety Booster Seats:** Designed for children who have outgrown their safety seats. The Belt Positioning Booster can be used if a shoulder/lap belt is available. These seats fit children 30–80 lbs. Some belt-positioning boosters have high backs to provide whiplash protection in vehicles with low seat backs. If the car has lap belts only, then a booster with a shield (Shield Booster) is used for children from 30–60 lbs.
4. **Child Safety Seat (forward-facing only):** Most have 5-point harnesses for upper body restraint and fit children from one year of age (20–25 lbs.) to 40 lbs.

Car Seats continued

Each year, thousands of children under age six come into contact with poisonous substances. Many of these exposures can be prevented by keeping toxic materials inaccessible to children by using them in a way that doesn't contaminate play surfaces or food, or even by eliminating them from the child care environment. Since infants and toddlers explore their environment by putting everything in their mouths, the safest approach is to keep the child care setting as free as possible from items that could be poisonous. Appendix I lists alternatives to toxic art materials.

Plants are among the most common household substances ingested by children. It is hard to determine every commercially available household plant's toxicity, so the safest approach is to keep all plants out of the reach of children. All outside plants and their leaves, fruit, and stems should be considered potentially toxic. A list from the American Red Cross Child Care Course with some of the more common poisonous plants of which to be aware is in Appendix I.

For any questions about poisoning, contact The Washington Poison Center (see Resources and References).

Poisoning

Sudden Infant Death Syndrome (SIDS) is the sudden and unexplained death of an infant under one year of age. SIDS is the major cause of death in infants from one month to one year of age and kills nearly 5,000 infants in the United States every year. The specific causes of this disorder aren't fully understood, but there is consensus from research that a number of different causes, rather than a single factor, are involved in SIDS deaths.

Some factors are beyond the control of the health consultant or the child care provider. Teen pregnancy, inadequate prenatal care, low birth weight, and smoking during pregnancy place infants at higher risk for SIDS. A number of risk factors can be minimized, though, and as the consultant, you can be a resource to providers to adopt the following practices that will decrease the risk of SIDS.

Sleep Position

In 1992, the American Academy of Pediatrics recommended that all healthy infants be placed on their backs to sleep. For many parents and child care providers, this was new information. Doctors and nurses had previously recommended placing infants on their tummies to sleep to prevent choking. There is no evidence that sleeping on the back causes choking, and now statistics are showing that fewer infants are dying of SIDS if infants sleep on their backs. To help raise awareness about this effective prevention strategy, the national *Back to Sleep* campaign was launched in 1994. Since then, the death rate from SIDS has decreased by over 25% nationwide. In Washington state, the number of SIDS deaths in 1991 was 179; in 1998, there were 92 SIDS deaths.

SIDS Prevention

SIDS Prevention continued

Although the recommendation appears simple (infants should be put to sleep on their backs), you can expect to receive a variety of questions from parents and providers. It is important for the CCHC to remind the child care provider to always put infants to sleep on their back. The following points are excerpted from *Back to Sleep – Questions and Answers for Professionals on Infant Sleeping Position and SIDS* (to find out how to receive a copy of this brochure see the Resources and References).

Q: Is the side position as effective as the back?

A: Studies indicate that the risk of SIDS is greater for infants placed on their sides versus those on their backs; infants placed on their sides have a higher likelihood of spontaneously turning to prone.

Q: Are there any infants who should be placed prone for sleep?

A: Most infants should sleep on their backs, but a few infants have health conditions (i.e., reflux, certain upper airway malformations) that might require them to sleep on their tummies. If families request that their infants sleep on their tummies, the child care would be wise to request a written note from the health provider and/or parent to that effect.

Q: Should healthy infants ever be placed prone?

A: Since the initiation of the *Back to Sleep* campaign, some people have misinterpreted the recommendation to suggest that infants should never be placed prone. This is incorrect. Developmental experts advise that infants can and should be placed on their tummies when awake for shoulder girdle motor development. Therefore, providers and families should be advised that some “tummy time,” when the infant is awake and observed, is desirable.

Q: If an infant doesn’t sleep well in the supine position, is it okay to place the infant prone?

A: Positional preference appears to be a learned behavior among infants from birth to four to six months of age. Infants placed on the back at birth (as is the practice in hospital newborn nurseries) will become accustomed to this position.

Q: At what age can you stop using the back position for sleep?

A: The first six months, when infants are forming sleeping habits, are probably the most important time to focus on. However, since the incidence of SIDS is highest during the first year of life, it seems reasonable to continue to place infants on their backs for sleep throughout infancy. Of even greater concern is the increase in SIDS deaths when infants who sleep on their backs at home are placed on their tummies by other caregivers. A recent study at Washington University in St. Louis showed that back sleepers who nap on their tummies face an 18-fold risk of SIDS. As the consultant to infant programs, assessment of napping practices and education about the importance of back to sleep is vital to reducing the risk of SIDS in the child care setting.

Q: Will supine sleeping cause misshapen (flat) heads?

A: Although there may be some increase in flat spots on the head with supine sleeping, this is almost always a benign condition that disappears within several months after the infant has begun to sit up. Techniques to avoid flat spots include reversing the head-to-toe axis in the crib, and changing the orientation of the infant to outside activity (e.g., the door of the room) to encourage the infant to turn the head to alternate sides.

Other Practices to Reduce the Risk of SIDS



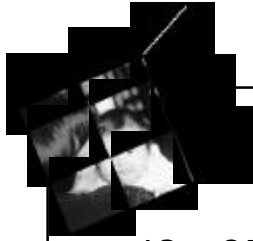
Caregiver Tip Strategies for Preventing SIDS

In addition to placing infants on their backs to sleep, child care providers can further reduce the risk of SIDS with the following practices.

1. **Bedding:** Make sure infants sleep on firm mattresses. Don't use fluffy blankets or comforters under infants or to cover infants. If using a blanket put infant with feet at the foot of the crib. Tuck a thin blanket around the crib mattress, reaching only as far as the infant's chest. Don't let infants sleep on waterbeds, sheepskins, pillows, or other soft materials. Don't place soft stuffed toys or pillows in the cribs of infants under one year of age; these items can potentially come into close contact with the infant's face, blocking the flow of air.
2. **Temperature:** Infants should be kept warm, but they should not be allowed to get too warm. Keep the temperature in the napping area so that it feels comfortable to the caregiver. Consider using a sleeper or other sleep clothing as an alternative to blankets, with no other covering. Keep the infant's head uncovered during sleep.
3. **Support Healthy Practices at Home:** Child care providers and health consultants can have a positive influence on family's practices at home. You can provide education for families that the risk of SIDS decreases when: no one smokes around the infant, the infant is breast-fed, and the infant receives regular well child care, including immunizations.
4. **The Consumer Product Safety Commission (CPSC)** has updated safety alerts. Please visit their website for current information (see Resources and References).



Other
Practices
to Reduce the
Risk of SIDS
continued



Caregiver Tip

If a SIDS Death Occurs in a Child Care Program

As more infants under one year of age receive care outside the home, the chance of a SIDS death in a child care setting increases. Although it is difficult and frightening for providers to consider this possibility, it is important for them to be prepared and to follow these steps if an infant dies while in their care:

1. Call 911.
2. Administer CPR.
3. Call the parents.
4. Call the child care licensor.
5. Call CPS.
6. Call the SIDS Foundation of Washington. They have “Grief Packets for Child Care Providers” as well as trained “Grief Companions” who can support caregivers following a SIDS death.
7. Contact your CCHC or your local health department for additional resources.

Incorporating This Chapter Into Your Practice

- At the centers and homes you consult with, identify how many of the “essentials in the infant/toddler environment” are present.
- Refer to policies and samples in the reference section of the manual to refine or develop policies for the program.
- Call the Safety Restraint Coalition to arrange for car safety restraint training for yourself, providers, and families.
- Call the SIDS Foundation of Washington for information about SIDS education materials that are available.